IN THE CLAIMS

Please amend the claims as follows:

1.   (Currently Amended) A method for subcarrier selection for a system employing orthogonal frequency division multiple access (OFDMA) comprising:

partitioning subcarriers into a plurality of groups of at least one cluster of subcarriers; and

receiving an indication of a selection by a ~~the~~ subscriber of one or more groups in the plurality of groups; and

allocating at least one cluster in the one or more groups of clusters selected by the <u>subscriber</u> ~~subcarrier~~ for use in communication with the subscriber<u>, such that the at least one cluster of subcarriers is only allocated to one subscriber</u>.

2.   (Original) The method defined in Claim 1 further comprising the subscriber sending the indication to a base station.

3.   (Original) The method defined in Claim 1 further comprising sending an indication of the group of clusters selected by the base station for use by the subscriber.

4.   (Original) The method defined in Claim 1 wherein clusters in each of the plurality of groups of clusters are spaced apart over bandwidth allocatable by the base station.

5.   (Original) The method defined in Claim 1 wherein clusters in each of the plurality of groups are spaced apart farther than coherent bandwidth of each channel between the base station and the subscriber.

6.   (Currently Amended) <u>A method for subcarrier selection for a system employing orthogonal frequency division multiple access (OFDMA) comprising:</u> ~~The method defined in Claim 1 further comprising~~

<u>partitioning subcarriers into a plurality of groups of at least one cluster of subcarriers; and</u>

<u>receiving an indication of a selection by a subscriber of one or more groups in the plurality of groups;</u>

<u>allocating at least one cluster in the one or more groups of clusters selected by the subscriber for use in communication with the subscriber, including</u> selecting the at least one cluster based on a group priority in which the subscriber has a higher priority for use of the group of clusters containing the at least one cluster than at least one other subscriber.

7.   (Original) The method defined in Claim 1 wherein the one or more groups is only a subset of all of the groups of clusters allocatable by a base station.

8.   (Original) The method defined in Claim 1 further comprising:
sending a pilot signal to the subscriber.

9.   (Original) The method defined in Claim 8 wherein the pilot signal indicates availability of each cluster.

10.   (Original) The method defined in Claim 1 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information comprises SINR information for at least one cluster in each of the one or more groups.

11.   (Original) The method defined in Claim 10 wherein the subscriber has a fixed association with the at least one group of clusters, such that group identifier information to identify groups associated with the SINR information is not necessary.

12.   (Currently Amended) The method defined in Claim 1 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information is ordered based on ~~the~~ SINR values of clusters in the one or more groups.

13.   (Currently Amended) <u>A method for subcarrier selection for a system employing orthogonal frequency division multiple access (OFDMA) comprising:</u> ~~The method defined in Claim 1 further comprising~~

     <u>partitioning subcarriers into a plurality of groups of at least one cluster of subcarriers; and</u>

     <u>receiving an indication of a selection by a subscriber of one or more groups in the</u> plurality of groups;

     receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information comprises a group identifier and SINR value of each cluster within each group<u>; and</u>

allocating at least one cluster in the one or more groups of clusters selected by the

subscriber for use in communication with the subscriber.

14.   (Original) The method defined in Claim 13 wherein the group identifier

comprises a group index.

15.   (Original) The method defined in Claim 13 wherein the feedback information

is formatted with, for each of the one or more groups, a group identifier followed by the

SINR values of clusters in said each of the one or more groups.

16.   (Original) The method defined in Claim 1 further comprising receiving

feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information is protected using error correcting codes.

17.   (Currently Amended) A method for subcarrier selection for a system employing

orthogonal frequency division multiple access (OFDMA) comprising: The method defined in

Claim 1 further comprising

partitioning subcarriers into a plurality of groups of at least one cluster of subcarriers; and

receiving an indication of a selection by a subscriber of one or more groups in the

plurality of groups;

receiving feedback information on the one or more groups of clusters of subcarriers from

the subscriber, and wherein the feedback information is compressed using source coding

techniques and encoded with error correcting codes; and

allocating at least one cluster in the one or more groups of clusters selected by the

subscriber for use in communication with the subscriber.

18.   (Currently Amended) A method for subcarrier selection for a system employing

orthogonal frequency division multiple access (OFDMA) comprising: ~~The method defined in~~

~~Claim 1 further comprising~~

partitioning subcarriers into a plurality of groups of at least one cluster of subcarriers; and

receiving an indication of a selection by a subscriber of one or more groups in the

plurality of groups;

receiving feedback information on the one or more groups of clusters of subcarriers from

the subscriber, and wherein the feedback information comprises a list of candidate cluster groups

desired for use by the subscriber and their associated signal plus interference to noise ratio

(SINR), the candidate clusters desired for use being a set of all possible clusters with SINRs

relatively higher than other clusters in the set of all possible clusters; and

allocating at least one cluster in the one or more groups of clusters selected by the

subscriber for use in communication with the subscriber.

19.   (Original) The method defined in Claim 18 wherein the list of candidate

cluster groups is ordered based on SINR values of clusters in the list.

20.   (Original) The method defined in Claim 18 wherein the list of candidate

cluster groups is ordered based on an SINR associated with each cluster in the group of

clusters and availability of cluster groups in the list.

21. (Original) The method defined in Claim 18 wherein the feedback information includes a cluster group identifier followed by an SINR value for each cluster in the candidate cluster group.

22. (Original) The method defined in Claim 21 wherein the group identifier comprises a group index.

23. (Original) The method defined in Claim 1 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the subscriber is associated with at least one group of clusters and, further wherein the feedback information includes an SINR value associated with each group of clusters without explicitly specifying an index to the group of clusters.

24. (Currently Amended) <u>A method for subcarrier selection for a system employing orthogonal frequency division multiple access (OFDMA) comprising:</u> ~~The method defined in Claim 1 further comprising:~~

    <u>partitioning subcarriers into a plurality of groups of at least one cluster of subcarriers; and</u>

    <u>receiving an indication of a selection by a subscriber of one or more groups in the plurality of groups;</u>

    <u>allocating at least one cluster in the one or more groups of clusters selected by the subscriber for use in communication with the subscriber;</u>

    receiving additional feedback information on the one or more groups of clusters; and

    allocating additional clusters to the subscriber.

25-31. (Cancelled)

32.   (Currently Added) The method defined in Claim 6 further comprising the subscriber sending the indication to a base station.

33.   (Currently Added) The method defined in Claim 6 further comprising sending an indication of the group of clusters selected by the base station for use by the subscriber.

34.   (Currently Added) The method defined in Claim 6 wherein clusters in each of the plurality of groups of clusters are spaced apart over bandwidth allocatable by the base station.

35.   (Currently Added) The method defined in Claim 6 wherein clusters in each of the plurality of groups are spaced apart farther than coherent bandwidth of each channel between the base station and the subscriber.

36.   (Currently Added) The method defined in Claim 6 wherein the one or more groups is only a subset of all of the groups of clusters allocatable by a base station.

37.   (Currently Added) The method defined in Claim 6 further comprising:

sending a pilot signal to the subscriber.

38.　(Currently Added) The method defined in Claim 37 wherein the pilot signal indicates availability of each cluster.

39.　(Currently Added) The method defined in Claim 6 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information comprises SINR information for at least one cluster in each of the one or more groups.

40.　(Currently Added) The method defined in Claim 39 wherein the subscriber has a fixed association with the at least one group of clusters, such that group identifier information to identify groups associated with the SINR information is not necessary.

41.　(Currently Added) The method defined in Claim 6 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information is ordered based on SINR values of clusters in the one or more groups.

42.　(Currently Added) The method defined in Claim 6 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information comprises a group identifier and SINR value of each cluster within each group.

43.　(Currently Amended) The method defined in Claim 42 wherein the group identifier comprises a group index.

44.   (Currently Added) The method defined in Claim 42 wherein the feedback

information is formatted with, for each of the one or more groups, a group identifier followed

by the SINR values of clusters in said each of the one or more groups.

45.   (Currently Added) The method defined in Claim 6 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information is protected using error correcting codes.

46.   (Currently Added) The method defined in Claim 6 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information is compressed using source coding

techniques and encoded with error correcting codes.

47.   (Currently Added) The method defined in Claim 6 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information comprises a list of candidate cluster groups

desired for use by the subscriber and their associated signal plus interference to noise ratio

(SINR), the candidate clusters desired for use being a set of all possible clusters with SINRs

relatively higher than other clusters in the set of all possible clusters.

48.   (Currently Added) The method defined in Claim 47 wherein the list of

candidate cluster groups is ordered based on SINR values of clusters in the list.

49.   (Currently Added) The method defined in Claim 47 wherein the list of

candidate cluster groups is ordered based on an SINR associated with each cluster in the

group of clusters and availability of cluster groups in the list.

50.   (Currently Added) The method defined in Claim 47 wherein the feedback

information includes a cluster group identifier followed by an SINR value for each cluster in

the candidate cluster group.

51.   (Currently Added) The method defined in Claim 50 wherein the group

identifier comprises a group index.

52.   (Currently Added) The method defined in Claim 6 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the subscriber is associated with at least one group of clusters and,

further wherein the feedback information includes an SINR value associated with each group

of clusters without explicitly specifying an index to the group of clusters.

53.   (Currently Added) The method defined in Claim 6 further comprising receiving

additional feedback information on the one or more groups of clusters; and

allocating additional clusters to the subscriber.

54.   (Currently Added) An apparatus comprising:

a cluster allocation controller to receive an indication of a selection by a subscriber of one

or more groups in a plurality of groups of at least one cluster of subcarriers and to allocate at

least one cluster in the one or more groups of clusters selected by the subscriber for use in

communication with the subscriber by selecting the at least one cluster based on a group priority

in which the subscriber has a higher priority for use of the group of clusters containing the at

least one cluster than at least one other subscriber; and

an orthogonal frequency division multiplexing (OFDM) transceiver coupled to the cluster

allocation controller to send a notification to the subscriber indicating the at least one cluster in

the one or more groups of clusters to be used by the subscriber.

55.   (Currently Added) The method defined in Claim 13 further comprising the

subscriber sending the indication to a base station.

56.   (Currently Added) The method defined in Claim 13 further comprising sending an

indication of the group of clusters selected by the base station for use by the subscriber.

57.   (Currently Added) The method defined in Claim 13 wherein clusters in each

of the plurality of groups of clusters are spaced apart over bandwidth allocatable by the base

station.

58.   (Currently Added) The method defined in Claim 13 wherein clusters in each

of the plurality of groups are spaced apart farther than coherent bandwidth of each channel

between the base station and the subscriber.

59.   (Currently Added) The method defined in Claim 13 further comprising

selecting the at least one cluster based on a group priority in which the subscriber has a

higher priority for use of the group of clusters containing the at least one cluster than at least

one other subscriber.

60.   (Currently Added) The method defined in Claim 13 wherein the one or more

groups is only a subset of all of the groups of clusters allocatable by a base station.

61.   (Currently Added) The method defined in Claim 13 further comprising:

sending a pilot signal to the subscriber.

62.   (Currently Added) The method defined in Claim 61 wherein the pilot signal

indicates availability of each cluster.

63.   (Currently Added) The method defined in Claim 13 further comprising receiving

feedback information on the one or more groups of clusters of subcarriers from the subscriber,

and wherein the feedback information comprises SINR information for at least one cluster in

each of the one or more groups.

64.   (Currently Added) The method defined in Claim 63 wherein the subscriber has a

fixed association with the at least one group of clusters, such that group identifier information to

identify groups associated with the SINR information is not necessary.

65.   (Currently Added) The method defined in Claim 13 further comprising receiving

feedback information on the one or more groups of clusters of subcarriers from the subscriber,

and wherein the feedback information is ordered based on SINR values of clusters in the one or

more groups.

66.   (Currently Added) The method defined in Claim 13 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information is protected using error correcting codes.

67.   (Currently Added) The method defined in Claim 13 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information is compressed using source coding

techniques and encoded with error correcting codes.

68.   (Currently Added) The method defined in Claim 13 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information comprises a list of candidate cluster groups

desired for use by the subscriber and their associated signal plus interference to noise ratio

(SINR), the candidate clusters desired for use being a set of all possible clusters with SINRs

relatively higher than other clusters in the set of all possible clusters.

69.   (Currently Added) The method defined in Claim 68 wherein the list of

candidate cluster groups is ordered based on SINR values of clusters in the list.

70. (Currently Added) The method defined in Claim 68 wherein the list of candidate cluster groups is ordered based on an SINR associated with each cluster in the group of clusters and availability of cluster groups in the list.

71. (Currently Added) The method defined in Claim 68 wherein the feedback information includes a cluster group identifier followed by an SINR value for each cluster in the candidate cluster group.

72. (Currently Added) The method defined in Claim 71 wherein the group identifier comprises a group index.

73. (Currently Added) The method defined in Claim 13 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the subscriber is associated with at least one group of clusters and, further wherein the feedback information includes an SINR value associated with each group of clusters without explicitly specifying an index to the group of clusters.

74. (Currently Added) The method defined in Claim 13 further comprising:

receiving additional feedback information on the one or more groups of clusters; and

allocating additional clusters to the subscriber.

75. (Currently Added) An apparatus comprising:

a cluster allocation controller

to receive an indication of a selection by a subscriber of one or more groups in a

plurality of groups of at least one cluster of subcarriers and feedback information on the one or

more groups of clusters of subcarriers from the subscriber, and wherein the feedback information

comprises a group identifier and SINR value of each cluster within each group, and

to allocate at least one cluster in the one or more groups of clusters selected by the

subscriber for use in communication with the subscriber; and

an orthogonal frequency division multiplexing (OFDM) transceiver coupled to the

cluster allocation controller to send a notification to the subscriber indicating the at least one

cluster in the one or more groups of clusters to be used by the subscriber.

76.   (Currently Added) The method defined in Claim 17 further comprising the

subscriber sending the indication to a base station.

77.   (Currently Added) The method defined in Claim 17 further comprising sending an

indication of the group of clusters selected by the base station for use by the subscriber.

78.   (Currently Added) The method defined in Claim 17 wherein clusters in each

of the plurality of groups of clusters are spaced apart over bandwidth allocatable by the base

station.

79.   (Currently Added) The method defined in Claim 17 wherein clusters in each

of the plurality of groups are spaced apart farther than coherent bandwidth of each channel

between the base station and the subscriber.

80. (Currently Added) The method defined in Claim 17 further comprising selecting the at least one cluster based on a group priority in which the subscriber has a higher priority for use of the group of clusters containing the at least one cluster than at least one other subscriber.

81. (Currently Added) The method defined in Claim 17 wherein the one or more groups is only a subset of all of the groups of clusters allocatable by a base station.

82. (Currently Added) The method defined in Claim 17 further comprising:

sending a pilot signal to the subscriber.

83. (Currently Added) The method defined in Claim 82 wherein the pilot signal indicates availability of each cluster.

84. (Currently Added) The method defined in Claim 17 wherein the feedback information comprises SINR information for at least one cluster in each of the one or more groups.

85. (Currently Added) The method defined in Claim 84 wherein the subscriber has a fixed association with the at least one group of clusters, such that group identifier information to identify groups associated with the SINR information is not necessary.

86. (Currently Added) The method defined in Claim 17 wherein the feedback information is ordered based on SINR values of clusters in the one or more groups.

87.   (Currently Added) The method defined in Claim 17 wherein the feedback

information comprises a group identifier and SINR value of each cluster within each group.

88.   (Currently Added) The method defined in Claim 87 wherein the group

identifier comprises a group index.

89.   (Currently Added) The method defined in Claim 87 wherein the feedback

information is formatted with, for each of the one or more groups, a group identifier followed

by the SINR values of clusters in said each of the one or more groups.

90.   (Currently Added) The method defined in Claim 17 wherein the feedback

information is protected using error correcting codes.

91.   (Currently Added) The method defined in Claim 17 wherein the feedback

information comprises a list of candidate cluster groups desired for use by the subscriber and

their associated signal plus interference to noise ratio (SINR), the candidate clusters desired

for use being a set of all possible clusters with SINRs relatively higher than other clusters in

the set of all possible clusters codes.

92.   (Currently Added) The method defined in Claim 91 wherein the list of

candidate cluster groups is ordered based on SINR values of clusters in the list.

93.   (Currently Added) The method defined in Claim 91 wherein the list of

candidate cluster groups is ordered based on an SINR associated with each cluster in the

group of clusters and availability of cluster groups in the list.

94.   (Currently Added) The method defined in Claim 91 wherein the feedback

information includes a cluster group identifier followed by an SINR value for each cluster in

the candidate cluster group.

95.   (Currently Added) The method defined in Claim 94 wherein the group

identifier comprises a group index.

96.   (Currently Added) The method defined in Claim 17 wherein the subscriber is

associated with at least one group of clusters and, further wherein the feedback information

includes an SINR value associated with each group of clusters without explicitly specifying

an index to the group of clusters.

97.   (Currently Added) The method defined in Claim 17 further comprising

receiving additional feedback information on the one or more groups of clusters; and

allocating additional clusters to the subscriber.

98.   (Currently Added) An apparatus comprising:

a cluster allocation controller

to receive an indication of a selection by a subscriber of one or more groups in a

plurality of groups of at least one cluster of subcarriers and feedback information on the one or

more groups of clusters of subcarriers from the subscriber, and wherein the feedback information

is compressed using source coding techniques and encoded with error correcting codes, and

to allocate at least one cluster in the one or more groups of clusters selected by the

subscriber for use in communication with the subscriber; and

an orthogonal frequency division multiplexing (OFDM) transceiver coupled to the cluster

allocation controller to send a notification to the subscriber indicating the at least one cluster in

the one or more groups of clusters to be used by the subscriber.

99.   (Currently Added) The method defined in Claim 18 further comprising the

subscriber sending the indication to a base station.

100.   (Currently Added) The method defined in Claim 18 further comprising sending an

indication of the group of clusters selected by the base station for use by the subscriber.

101.   (Currently Added) The method defined in Claim 18 wherein clusters in each

of the plurality of groups of clusters are spaced apart over bandwidth allocatable by the base

station.

102.   (Currently Added) The method defined in Claim 18 wherein clusters in each

of the plurality of groups are spaced apart farther than coherent bandwidth of each channel

between the base station and the subscriber.

103.   (Currently Added) The method defined in Claim 18 further comprising

selecting the at least one cluster based on a group priority in which the subscriber has a

higher priority for use of the group of clusters containing the at least one cluster than at least

one other subscriber.

104.   (Currently Added) The method defined in Claim 18 wherein the one or more

groups is only a subset of all of the groups of clusters allocatable by a base station.

105.   (Currently Added) The method defined in Claim 18 further comprising:

sending a pilot signal to the subscriber.

106.   (Currently Added) The method defined in Claim 105 wherein the pilot signal

indicates availability of each cluster.

107.   (Currently Added) The method defined in Claim 18 wherein the subscriber has a

fixed association with the at least one group of clusters, such that group identifier information to

identify groups associated with the SINR information is not necessary.

108.   (Currently Added) The method defined in Claim 18 wherein the feedback

information is ordered based on SINR values of clusters in the one or more groups.

109.   (Currently Added) The method defined in Claim 18 wherein the feedback

information comprises a group identifier and SINR value of each cluster within each group.

110.   (Currently Added) The method defined in Claim 109 wherein the group

identifier comprises a group index.

111. (Currently Added) The method defined in Claim 109 wherein the feedback information is formatted with, for each of the one or more groups, a group identifier followed by the SINR values of clusters in said each of the one or more groups.

112. (Currently Added) The method defined in Claim 18 wherein the feedback information is protected using error correcting codes.

113. (Currently Added) The method defined in Claim 18 wherein the feedback information is compressed using source coding techniques and encoded with error correcting codes.

114. (Currently Added) The method defined in Claim 18 wherein the subscriber is associated with at least one group of clusters and, further wherein the feedback information includes an SINR value associated with each group of clusters without explicitly specifying an index to the group of clusters.

115. (Currently Added) The method defined in Claim 18 further comprising:

receiving additional feedback information on the one or more groups of clusters; and

allocating additional clusters to the subscriber.

116. (Currently Added) An apparatus comprising:

a cluster allocation controller

to receive an indication of a selection by a subscriber of one or more groups in a plurality of groups of at least one cluster of subcarriers and feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information comprises a list of candidate cluster groups desired for use by the subscriber and their associated signal plus interference to noise ratio (SINR), the candidate clusters desired for use being a set of all possible clusters with SINRs relatively higher than other clusters in the set of all possible clust, and

to allocate at least one cluster in the one or more groups of clusters selected by the subscriber for use in communication with the subscriber; and

an orthogonal frequency division multiplexing (OFDM) transceiver coupled to the cluster allocation controller to send a notification to the subscriber indicating the at least one cluster in the one or more groups of clusters to be used by the subscriber.

117.   (Currently Added) The method defined in Claim 24 further comprising the subscriber sending the indication to a base station.

118.   (Currently Added) The method defined in Claim 24 further comprising sending an indication of the group of clusters selected by the base station for use by the subscriber.

119.   (Currently Added) The method defined in Claim 24 wherein clusters in each of the plurality of groups of clusters are spaced apart over bandwidth allocatable by the base station.

120.   (Currently Added) The method defined in Claim 24 wherein clusters in each

of the plurality of groups are spaced apart farther than coherent bandwidth of each channel

between the base station and the subscriber.

121.   (Currently Added) The method defined in Claim 24 further comprising

selecting the at least one cluster based on a group priority in which the subscriber has a

higher priority for use of the group of clusters containing the at least one cluster than at least

one other subscriber.

122.   (Currently Added) The method defined in Claim 24 wherein the one or more

groups is only a subset of all of the groups of clusters allocatable by a base station.

123.   (Currently Added) The method defined in Claim 24 further comprising:

sending a pilot signal to the subscriber.

124.   (Currently Added) The method defined in Claim 123 wherein the pilot signal

indicates availability of each cluster.

125.   (Currently Added) The method defined in Claim 24 further comprising receiving

feedback information on the one or more groups of clusters of subcarriers from the subscriber,

and wherein the feedback information comprises SINR information for at least one cluster in

each of the one or more groups.

126. (Currently Added) The method defined in Claim 125 wherein the subscriber has a fixed association with the at least one group of clusters, such that group identifier information to identify groups associated with the SINR information is not necessary.

127. (Currently Added) The method defined in Claim 24 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information is ordered based on SINR values of clusters in the one or more groups.

128. (Currently Added) The method defined in Claim 24 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information comprises a group identifier and SINR value of each cluster within each group.

129. (Currently Added) The method defined in Claim 128 wherein the group identifier comprises a group index.

130. (Currently Added) The method defined in Claim 128 wherein the feedback information is formatted with, for each of the one or more groups, a group identifier followed by the SINR values of clusters in said each of the one or more groups.

131. (Currently Added) The method defined in Claim 24 further comprising receiving feedback information on the one or more groups of clusters of subcarriers from the subscriber, and wherein the feedback information is protected using error correcting codes.

132.   (Currently Added) The method defined in Claim 24 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information is compressed using source coding

techniques and encoded with error correcting codes.

133.   (Currently Added) The method defined in Claim 24 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the feedback information comprises a list of candidate cluster groups

desired for use by the subscriber and their associated signal plus interference to noise ratio

(SINR), the candidate clusters desired for use being a set of all possible clusters with SINRs

relatively higher than other clusters in the set of all possible clusters.

134.   (Currently Added) The method defined in Claim 133 wherein the list of

candidate cluster groups is ordered based on SINR values of clusters in the list.

135.   (Currently Added) The method defined in Claim 133 wherein the list of

candidate cluster groups is ordered based on an SINR associated with each cluster in the

group of clusters and availability of cluster groups in the list.

136.   (Currently Added) The method defined in Claim 133 wherein the feedback

information includes a cluster group identifier followed by an SINR value for each cluster in

the candidate cluster group.

137.   (Currently Added) The method defined in Claim 136 wherein the group

identifier comprises a group index.

138.   (Currently Added) The method defined in Claim 24 further comprising

receiving feedback information on the one or more groups of clusters of subcarriers from the

subscriber, and wherein the subscriber is associated with at least one group of clusters and,

further wherein the feedback information includes an SINR value associated with each group

of clusters without explicitly specifying an index to the group of clusters.

139.   (Currently Added) An apparatus comprising:

a cluster allocation controller

        to receive an indication of a selection by a subscriber of one or more groups in a

plurality of groups of at least one cluster of subcarriers, and

        to allocate at least one cluster in the one or more groups of clusters selected by the

subscriber for use in communication with the subscriber; and

        an orthogonal frequency division multiplexing (OFDM) transceiver coupled to the cluster

allocation controller to send a notification to the subscriber indicating the at least one cluster in

the one or more groups of clusters to be used by the subscriber, wherein the cluster allocation

controller is operable to receive additional feedback information on the one or more groups of

clusters and allocate additional clusters to the subscriber.

140.   (Currently Added) An apparatus comprising:

a cluster allocation controller

to receive an indication of a selection by a subscriber of one or more groups in a

plurality of groups of at least one cluster of subcarriers, and

to allocate at least one cluster in the one or more groups of clusters selected by the

subscriber for use in communication with the subscriber, such that the at least one cluster of

subcarriers is only allocated to one subscriber; and

an orthogonal frequency division multiplexing (OFDM) transceiver coupled to the

cluster allocation controller to send a notification to the subscriber indicating the at least one

cluster in the one or more groups of clusters to be used by the subscriber.